INVESTIGATOR'S ANNUAL REPORT

National Park Service

All or some of the information provided may be available to the public

Reporting Year:		Park: Shenandoah NP	
Principal Investigator:		Office Phone:	
John M. Skelly		(814) 865-7584	
, , , , , , , , , , , , , , , , , , , ,		Email:	
		jms34@psu.edu	
Address:		Office Fax:	
Dept of Plant Pathology 108 Buckout Laboratory Penn State University University Park, PA 16802 PA		(814) 863-7217	
Additional investigators or key field assistants (first name, last name, office phone, office email):			
Name: Dr. Donald D. Davis	Phone: n/a	Email: n/a	
Name: Dr. Kim C. Steiner	Phone: n/a	Email: n/a	
Permit#: SHEN1997AUME			
Park-assigned Study Id. #: unknown			
Project Title: Impact Of Ambient Ozone On Physiological, Visual And Growth Responses Of Sensitive Eastern Hardwood Tree Species Under Natural And Varying Conditions. (N-215)			
Permit Start Date: Jan 01, 1998		Permit Expiration Date Jan 01, 1998	
Study Start Date: Jan 01, 1996		Study End Date Jan 01, 1999	
Study Status: Completed			
Activity Type: Research			
Subject/Discipline: Air Quality			
Objectives: To determine whether radial growth or the relationship between ring-width variation and climate differ in relation to foliar O3 symptom severity within and among natural populations of three O3-sensitive hardwood tree species (black cherry, white ash and yellow-poplar).			
Findings and Status: Pairs of increment cores were collected form previously studied and tagged trees at three sites in the Shenandoah National Park during July, 1997. Trees cored by site and species are as follows. Dickey Ridge: 29 white ash, 14 black cherry, 27 yellow-poplar; Big Meadows: 23 white ash, 56 black cherry, 23 yellow-poplar; Sawmill Run: 23 white ash, 17 black cherry, 30 yellow-poplar. The total core collection nominally represents 242 trees and 484 cores. Field measurements taken with respect to each cored tree include species, tree number, dbh (diameter at breast height, 1.3m), crown class, length of sapwood on each core, total tree height, live crown length and average crown width from two measurements, slope aspect and slope steepness, and crown vigor rating. The cores are presently being surfaced to obtain the necessary ring boundary definition that will enable crossdating to ensure assignment of the correct year to each ring, and subsequent ring width measurement.			
For this study, were one or more specimens collected and removed from the park but not destroyed during analyses?			
Funding provided this reporting year by NF 0	PS:	Funding provided this reporting year by other sources: 194000	
Fill out the following ONLY IF the National college	Park Service supported this	project in this reporting year by providing money to a university or	

Full name of college or university:	Annual funding provided by NPS to university or college this reporting year:
n/a	0